

In The Claims:

Please amend the claims as follows:

1. (Amended) An artificial antigen which is specifically recognized by the antifilaggrin autoantibodies present in the serum of patients suffering from rheumatoid arthritis, which consists of a recombinant or synthetic polypeptide comprising at least 5 consecutive amino acid residues, at least one being an arginine residue, of a sequence derived from that of a filaggrin unit, by replacing at least one arginine residue with a citrulline residue.

2. (Amended) The artificial antigen as claimed in claim 1, which consists of a peptide comprising all or part of at least one sequence derived from the group consisting of the sequence corresponding to amino acids 144 to 314 of a human filaggrin unit, and the sequence corresponding to amino acids 76 to 144 of a human filaggrin unit, by replacing at least one arginine residue with a citrulline residue.

5. (Amended) A method for the in vitro diagnosis of rheumatoid arthritis comprising the steps of
providing an antigen as claimed in any one of claims 1 to 4;
providing a biological sample for diagnosis of rheumatoid arthritis;
bringing the biological sample into contact with the antigen under conditions allowing the formation of an antigen/antibody complex with autoantibodies specific for rheumatoid arthritis, which may be present in said biological sample;
detecting, by appropriate means, the antigen/antibody complex which may be formed.

ADH
sub E
C3
conce

6. (Amended) An antigenic composition for diagnosing the presence of autoantibodies specific for rheumatoid arthritis in a biological sample, which contains at least one antigen as claimed in any one of claims 1 to 4, with the exclusion of compositions with a structure identical to that of a preparation of isoforms of filaggrin which is purified from the human epidermis comprising a mixture of isoforms having a molecular weight of 40,000 measured by SDS-PAGE and a pI ranging between 5.8 and 7.4.

Please add the following new claims:

- C4
11. The composition of claim 6 wherein the antigen is labeled.
 12. The composition of claim 6 wherein the antigen is conjugated with a carrier molecule.